

CLAIMS:

1. An apparatus for collecting particulate material comprising a collection tray, a fire resistant collection
5 reservoir associated with said collection tray, and means for moving particulate material from said collection tray into said fire resistant collection reservoir.
2. An apparatus as claimed in claim 1, wherein said
10 reservoir is a container having a selectably operable lid.
3. An apparatus as claimed in claim 1 or 2, wherein
said reservoir includes a removable collection unit.
- 15 4. An apparatus as claimed in any preceding claim, wherein said reservoir is located beneath one end of said tray.
- 20 5. An apparatus as claimed in any of claims 2 to 4, wherein said moving means include a motor driven scraper carriage unit which includes scraper blade means arranged to reciprocatingly move particulate material from an inside base portion of said tray and into said reservoir.
- 25 6. An apparatus as claimed in claim 5, wherein when said scraper blade means is positioned above said reservoir, means are provided for opening said reservoir lid so that particulate moved by said blade is deposited
30 into said reservoir.

7. An apparatus as claimed in claim 6, wherein the means for opening said reservoir lid includes a pivotal lid having an abutment member arranged to be contacted by a member attached to said scraper carriage unit for
5 causing said lid to pivotally open.

8. An apparatus as claimed in claim 6, wherein the means for opening said reservoir lid includes a pivotal lid arranged to be opened and closed by electro-magnetic
10 means activatable by scraper carriage unit position detecting means.

9. An apparatus as claimed in claim 8, wherein said electro-magnetic means is an electrical solenoid coupled
15 with said lid.

10. An apparatus as claimed in any of claims 6 to 9, wherein there is provided detector means to determine the open and closed states of the lid and control means for
20 controlling motion of said moving means whereby, if said lid fails to open or close, movement of said moving means is terminated.

11. An apparatus as claimed in claim 5, wherein when
25 said scraper blade means is above said reservoir and said lid is open, means are provided for cleaning the scraper blade means, whereby particulate and dirt therefrom is deposited into said reservoir.

30 12. An apparatus as claimed in claim 5, wherein when said scraper blade means reciprocatingly re-traverses along said tray away from said reservoir, means are

provided for closing said reservoir lid and for lifting said scraper blade means away from said inside base portion of said tray so that particulate is not moved in a direction away from said reservoir.

5

13. An apparatus as claimed in claim 5, wherein when said scraper blade means is arranged to reciprocatingly move particulate material toward and into said reservoir, means are provided for ensuring rigidity of said scraper
10 blade means.

15

14. An apparatus as claimed in claim 13, wherein said means are provided for maintaining said scraper blade means orthogonally to the inside base portion of said
15 tray.

20

15. An apparatus as claimed in any preceding claim, wherein means are provided for limiting the range of motion of said moving means.

16. An apparatus as claimed in any preceding claim; wherein said moving means is controllable by timer means to effect reciprocation of said moving means.

25 19. A method of collecting particulate material including the steps of providing a collection tray into which particulate material is deposited, arranging a fire-resistant collection reservoir to be associated with said collection tray, said fire-resistant collection
30 reservoir having a lid, including the steps of providing means for moving particulate material toward said fire-resistant collection reservoir, opening the lid of said

reservoir and depositing said particulate into said reservoir.

20. A method as claimed in claim 17 and further
5 including the step of lifting said moving means, moving
said moving means away from said reservoir and closing
said lid.